Further 1) Carabidae from German New Guinea and its dependencies. (Col.)

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The present paper completes my report on the *Carabidae* in the collection of Herrn Gouverneur von Bennigsen (D. E. Z. p. 177—185).

Tribe Chlaeniini.

Chlaenius binotatus Dej. (Salomon Islands).

Chlaenius occultus n. sp.

Head large, glabrous, not punctate; prothorax cordate, glabrous, sparsely punctate; elytra convex, striate, humeral angles rounded with inner angle not marked, interstices convex, densely punctate. Head and prothorax olive green, nitid; elytra purpleblack, subviridescent towards sides; under surface black, nitid;

legs and antennae ferruginous-yellow, tarsi darker.

Head wide (2.9 mm across eyes), lightly biimpressed between eyes; the impressions elongate and a little rugulose posteriorly. Prothorax broader than long (3.2 × 4 mm), widest before middle (at anterior marginal seta), wider at base (3 mm) than at apex (2.8 mm); surface smooth with large sparsely placed punctures over posterior half and on middle of disc; sides arcuate on anterior three fourths, obtusely subangulate at widest part, sinuate posteriorly and meeting base at right angles; basal angles obtuse; apex truncate, angles obtuse; border reflexed, extending a little on apex on each side; median line well marked; lateral basal impressions deep, elongate. Elytra oval $(9.5 \times 6 \text{ mm})$, convex; striae narrow, crenulate; interstices lightly convex, minutely shagreened, densely covered with impressed punctures (in about four rather irregular rows on each interstice), 7th with some larger indistinct punctures among the others along its course. Prosternum punctate on each side between anterior part of coxal cavities; episterna smooth, with merely a few hardly noticeable small punctures. Met-episterna longer than broad, bordered externally, not sulcate on inner side of external border. Ventral segments shining, finely and lightly punctulate on each side - especially on three basal segments.

Length 15, breadth 6 mm. Hab.: Herbertshöhe.

1) Corrigenda in the first note:

p. 181 2nd line from bottom: for *L. habilis*, read *L. violacea*. p. 184 1st line: after "punctures" put a comma.

The following characters, which are found in this species, seem to fix its position in the genus, according to the system adopted by Chaudoir in his Monograph of the genus Chlaenius (1876), near Ch. Semperi Chaud. (1) Abdomen hardly, or but little punctate near sides; (2) elytra with interstitial punctures not ocellate; (3) met-episterna not sulcate near outer side; (4) elytra with marginal channel not angulate at shoulders. It evidently differs decidedly from Ch. Semperi by the shape of the prothorax. No species at all nearly related to Ch. occultus has been reported from New Guinea, or Australia.

Tribe Harpalini.

Gnathaphanus laeviceps Macleay.

Gazelle specimens (3) 11.5-13.5 mm in length.

Note: I have also seen it from Astrolabe Bay. The specimens from New Guinea and New Britain seem smaller (but not otherwise different) than the species as found on the mainland.

Gnathaphanus impressus Montrouzier.

Ann. Fr. 1860 p. 240. *Harpalus alternans* Castelnau. Trans. Roy. Soc. Victoria, VIII, 1868, p. 185.

Gazelle Peninsula. (3 specimens 3 a. 2; length 10-11.5 mm, breadth 3.8-4.25 mm.)

Note: I consider this species to be the same as the New Caledonian Amblygnathus impressus Montrz.; it is also conspecific with Harpalus alternans Cast., from Queensland. I suspect the identity of Gn. impressus with Gn. licinoides Hope (1842), but Hope's description is too vague for a definite opinion to be formed on this point without inspection of his type, or the discovery that the range of Gn. impressus extends to Port Essington. Hope gives the measurements as $5^3/_4 \times 1^3/_4$ lines; a specimen from Townsville, Queensland in my collection measures 12.5×4.5 mm.

Gnathaphanus impressipennis Castelnau.

Gazelle Peninsula. (Several specimens.) Also found in Australia and New Caledonia.

The three Papuan species of *Gnathaphanus* may be tabulated as under:

Elytra very strongly sinuate at apex; head large; colour black (including legs).

Elytra not mucronate at apex, 3rd interstice only seriate-punctate.

laeviceps Macleay.

Elytra mucronate at apex, 3rd, 5th and 7th interstices foveolate-punctate. *impressus* Montrouzier.

Elytra lightly sinuate at apex, 3rd and 5th interstices seriate punctate; upper surface with an aeneous tinge, legs testaceous. Size small 7.5—8.5 mm.

impressipennis Castelnau.

Stenolophus robustus n. sp.

Q. Oval, stout; prothorax transverse; elytra convex, fully striate, interstices narrow and costiform at apex. Black, nitid; reflexed border of prothorax testaceous; legs and palpi testaceous; antennae infuscate with two basal joints testaceous.

Head large (1.3 mm across eyes), convex; mandibles short; clipeal suture distinct, linear, giving off an oblique line from each extremity. Prothorax wide (1.25 × 2 mm); sides rounded; base a little wider than apex; basal angles widely rounded, not marked; apex widely and lightly emarginate; anterior angles obtuse; a wide very shallow punctate depression near each basal angle; median line feebly marked in middle of disc. Elytra convex, wide, ovate $(3.6 \times 2.5 \text{ mm})$, strongly declivous to sides and apex; disc behind peduncle slightly depressed; base wide, humeral angles rounded but a little marked; apex sinuate on each side at extremity of 9th interstice; striae strongly impressed, linear, entire, deeper on apical declivity; interstices hardly convex, narrow and convex on apical declivity, 2nd wider and bearing a short striole at base, 3rd unipunctate at apical fourth, 8th very narrow and costiform at apex, 9th wide at apex, seriate-punctate, the punctures interrupted on sides.

Length 5.5, breadth 2.5 mm.

Gazelle Peninsula. (Two specimens ♀.)

Differs conspicuously from all the Australian species which have been referred to *Stenolophus* and *Acupalpus* by its stouter and more robust form; and I believe these characters will distinguish it also from *Amphibia pallipes* 1) Montrz., from New Caledonia, which is unknown to me in nature.

The following features are found in this species, and serve to show its position in the tribe *Harpalini*; (1) labial palpi with penultimate joint bisetigerous; (2) eyes close to buccal fissure

¹⁾ It is the opinion of the Rev. Thos Blackburn that the Australian species now referred to *Stenolophus* require to be separated from that genus (cf. Trans. Roy. Soc. S. Aust. 1901, p. 115). If this view be accepted, probably the name *Amphibia* (Montrouzier, 1864) will be applicable to these species.

beneath; (3) mandibles short, not decussating; (4) front not decidedly biimpressed; (5) elytra fully striate, 8th stria well marked; (6) posterior tarsi with basal joint much longer than second (nearly as long as two succeeding joints together). The sinus of the mentum is edentate.

Tribe Trigonotomini 1).

Sub-tribe Morionides.

Genus Morio.

Morio d'Albertisi Chaudoir. (Gazelle Peninsula.) Morio longipennis Putzeys. (New Guinea; Stephans Ort, Simbang, Baining Berge. — Also found in Australia.)

Sub-tribe Trigonotomides.

Genus Lesticus.

Lesticus nitescens n. sp.

φ. Elongate-oval, depressed; elytra feebly striate. Upper surface nitid, head and pronotum olive green, elytra purple black (polished, submetallic with purple reflections); under surface, legs, clipeus and mandibles black; tarsi, antennae and mouth parts piceous.

Head large (4.5 mm across eyes), biimpressed between bases of antennae, impressions short, out-turned at posterior extremity (at anterior supra-orbital seta). Prothorax broader than long $(4.7 \times 6.25 \text{ mm})$, depressed on disc, laevigate, a little broader at base (4.7 mm) than at apex (4.5 mm); sides lightly rounded, obliquely narrowed to base, hardly subsinuate just before base; apex lightly emarginate; anterior angles obtuse; basal angles rectangular with summit obtuse; lateral basal impressions shallow, wide and flat at bottom. Elytra truncate-oval $(12 \times 8 \text{ mm})$; striae finely punctate, not deeper towards apex; interstices flat, 3^{rd} 3-punctate; inner humeral angle marked. Metasternum on each side, and all the episterna with deep punctures. Three

¹⁾ The late M. Tschitscherine proposed to replace the tribal names Feronini (inadmissable, as founded on the preoccupied generic name Feronia) and Pterostichini (inadmissable, in M. Tschitscherine's opinion, as founded on what is merely a subgenus of Platysma) by Platysmatini (1899). If, however, the tribal name Pterostichini (Erichson, 1837) requires to be changed, it seems to me that, while the genus Trigonotoma remains in the tribe, the tribal name should be under the law of priority Trigonotomini (Castelnau, Etudes Entomologiques, 1834).

basal ventral segments bearing some punctures. Posterior tarsi decidedly sulcate on outer side.

Length 21, breadth 8 mm.

New Guinea, Simbang. Gazelle Peninsula, Herbertshöhe. (The type is from Simbang.)

Compared with a species from Astrolabe Bay, which I identify as L. politus Chaud., L. nitescens differs (apart from colour) by prothorax more depressed, sides less rounded at widest part and much less sinuate posteriorly, basal angles less obtuse; elytra more depressed, less declivous to apex, striae much more lightly impressed (especially towards apex), 6th and 7th interstices quite flat towards apex.

Lesticus Bennigseni n. sp.

φ. Oval, robust, convex; prothorax strongly rounded on sides; elytra wide, oval, lightly striate, 3rd interstice 3-punctate. Head black with occiput metallic green; prothorax metallic-bronzygreen, border piceous; elytra metallic-green, 9th interstice and margin obscure, inflexed margin chalybeus; undersurface nitid; abdomen black; sternal side pieces metallic (olivaceus); legs black tarsi reddish.

Head large, convex (4.4 mm across eyes); frontal impressions deep, wide, giving off a branch externally just before anterior supra-orbital seta. Prothorax broadly cordiform (4.7 \times 6.4 mm), laevigate; base and apex of equal width (4.5 mm); sides strongly rounded, obliquely narrowed to base (hardly subsinuate posteriorly); basal angles obtuse; lateral basal impressions shallow; lateral border thick, convex. Elytra convex, oval (12 \times 8.5 mm), broadest behind middle, rounded on sides; humeral angle rounded, inner angle not marked; striae finely punctate, 7th deeper than others, especially towards apex, 8th and 9th strongly impressed and punctate; interstices flat, 7th and 8th convex near apex. Proepisterna smooth with four punctures opposite anterior margin of coxal cavities; mes-episterna punctate; metasternum on each side and met-episterna punctate; 1st ventral segment punctate. Posterior tarsi not sulcate externally.

Length 20, breadth 8.5 mm.

Gazelle Peninsula, Herbertshöhe. (unique.) 1)

This fine species seems very distinct; compared with L. nitescens Sl., it differs (apart from colour) by form more convex

¹⁾ Nachträglich ist mir ein Exemplar von N.-Pommern (Kinigunang: C. Ribbe) bekannt geworden: Dr. W. Horn.

and more widely oval; head with frontal impressions deeper; prothorax more ampliate and rounded at widest part, border thicker and more convex, basal angles obtuse; elytra more widely oval, more convex, similarly striate, but the puncturation of the striae more distinct, 8th and 9th striae much deeper, also 6th and 7th towards apex, 7th and 8th interstices convexly raised towards apex; posterior tarsi not sulcate externally, etc.

The four species of Lesticus from New Guinea and Australia may be tabulated thus:

Pro-episterna impunctate. (Metathorax on each side and met-episterna with only a few punctures. Upper surface green.)

L. chloronotus Dejean.

Pro-episterna, also meso- and meta-episterna, and metasternum on each side, deeply punctate.

Elytra with 7th and 8th interstices depressed posteriorly. Prothorax lightly rounded at widest part. (Posterior tarsi distinctly sulcate externally. Prothorax submetallic green, elytra blackish-purple.)

L. nitescens Sloane.

Elytra with 7th and 8th interstices convex posteriorly. Prothorax strongly rounded at widest part.

Elytra with all striae more deeply impressed towards apex. Colour olive-black.

L. politus Chaudoir.

Elytra with inner striae not more deeply impressed towards apex. Colour metallic green, prothorax bronzy. (Posterior tarsi not sulcate externally.)

L. Bennigseni Sloane.

Tribe Masoreini.

Genus Aephnidius.

Aephnidius adeloides Macleay.

Annulosa Javanica, p. 23, pl. 8, fig. 7. — Masoreus australis Sloane, Proc. Linn. Soc. N. S. Wales, XXIX, 1904, p. 535.

A single specimen from Gazelle Peninsula which is evidently Aephnidius adeloides Macl., and which is conspecific with Masoreus australis Sl. Bates reported Ae. adeloides as occurring in Bengal, Burma, Cochinchina, Japan, Java and Australia 1).

¹⁾ Ann. Mus. Civ. Genov., (2) XII, 1892, p. 404.

Tribe Dryptini.

Genus Dendrocellus.

Dendrocellus elegans n. sp.

Q. Upper surface of a rather bronzy green; under surface cyaneous; legs (apex of femora black), antennae (apical third of 1st joint only infuscate), and palpi testaceous; clipeus brownish, darker than mandibles and labrum.

Head punctate, longer than broad (1.8 — ex. labrum and mandibles — \times 1.6 mm). Prothorax punctate, longer than broad (2.1 \times 1.3 mm), widest in middle, feebly bordered at widest part, border obsolete near apex and base; sides decidedly sinuate at posterior third, out-turned to meet base; apex truncate; base truncate, a little wider than apex. Elytra oval, more than twice as wide as prothorax (7.5 \times 3.25 mm), punctate-striate; interstices subconvex, densely seriate-punctate; apex with outer angles triangular, acute.

Length 10.5, breadth 3.3 mm.

Baining Berge. Gazelle Peninsula. (Two specimens.)

A specimen (\mathfrak{P}) from Baining Berge has served me for the above description. This species seems to resemble D. ternatensis Chaud., which is unknown to me in nature. As far as I can judge by Chaudoir's description of D. ternatensis, D. elegans seems to differ by 2^{nd} and 3^{rd} joints of antennae testaceous, not brown; femora only infuscate at apex, not on apical third. From the Australian D. smaragdinus Chaud., it differs (from comparison with a specimen in my collection) by size larger; prothorax less cylindrical, sides more deeply sinuate posteriorly, more strongly out-turned to base; elytra wider, base more ampliate and more declivous, interstices less convex, punctures in the striae finer, those of the interstices more regular; eyes less hemispherically protuberant; 2^{nd} and 3^{rd} joints of antennae not brown, etc.

Tribe Miscelini.

Genus Miscelus.

The relationship of *Miscelus* to *Catascopus*, which seemed so evident to Lacordaire and Chaudoir, is not at all apparent to me; on the contrary, I feel compelled to regard *Miscelus* as the type of a distinct tribe, the position of which is near the *Helluonini*. The head with one supra-orbital puncture on each side, placed as in the *Chlaeniini* and *Harpalini*, the double row of strong bristles on the ligula, the wide intercoxal part of the

mesosternum, and the metasternum with a double row of small tubercles are characteristic features of *Miscelus*.

Miscelus stygicus Putzeys.

Stephansort; Gazelle Peninsula.

Note 1: Specimens of smaller size (10.5—11.7 mm) from Herbertshöhe have the prothorax more sinuate posteriorly with the basal angle subrectangular; I can only regard this as a form

of M. stygicus.

Note 2: M. morioformis Macl., I can only regard as a small form of M. stygicus. I compared a specimen of M. stygicus with the type of M. morioformis, in the Australian Museum, Sydney, and could find no difference between them, except the smaller size of M. morioformis (9.5 mm). M. morioformis has recently been found in Australia, at Coen, in north Queensland, by Mr. H. Hacker.

Note.

Macrocentra quadrispinosa Chaudoir. Rev. a. Mag. Zool. 1869, p. 206; Loxocara quadrispinosa, Sloane, Deutsch. Ent. Zeitschr. 1907, p. 179.

My genus Loxocara is identical with Chaudoir's genus Macrocentra and my species L. quadrispinosa in synonymous with Chaudoir's M. quadrispinosa. I had not known that Baron de Chaudoir had described this genus and species from New Guinea when I formed a new genus and new species on it.